

# Site Reliability Engineer

## Job Summary

Strongest Families Institute (SFI) ([www.strongestfamilies.com](http://www.strongestfamilies.com)), is an award-winning charity that delivers evidence-based mental health services to Canadians. . We've developed a sophisticated software platform called IRIS (Intelligent Research Intervention System) which is the backbone of service delivery at SFI. IRIS provides participant access to our program content and enables our coaches and support staff to track and supervise each participant's journey through their enrolled programs.

The Site Reliability Engineer will be responsible for leading our team's efforts to scale IRIS to meet skyrocketing demands while maintaining the reliability, performance and security of the platform.

## Technology

IRIS is a monolithic web application written in Python on Django and backed by PostgreSQL. While the codebase is generally mature and has been in production for over ten years, we are actively modernizing our technology stack and infrastructure, including initiatives such as implementation of our REST API, development of a mobile app with React Native, porting our web front-end to TypeScript + React, automation of our infrastructure with Ansible and migration of our services to Azure.

## Our Team

The IRIS development team is mostly comprised of full-stack developers practicing Agile/Scrum and DevOps. Quality is at the core of our culture, and peer code review is an integral part of our process. Our efforts are business critical for SFI and our contributions have a significant impact on both our colleagues who rely heavily on IRIS to perform their job duties as well as the thousands of families who benefit immensely from the mental health programs SFI delivers. You'll work closely with the IRIS product manager, software architect and VP Operations to identify, scope and prioritize your work in a manner that maximizes impact for the organization while keeping technical debt under control and improving the capabilities of our team.

## Duties & Responsibilities

As Site Reliability Engineer, you will be tasked with:

- Design and implementation of critical IRIS infrastructure (e.g. application servers, database servers, queues, messaging, transactional email/SMS)

- Design and implementation of logging, monitoring, alerting and analytics capabilities
- Configuration and management of our cloud providers, including Azure, AWS and Twilio
- Improving our existing automation (fabric, Ansible) for developer tooling, build and deployment
- Improving our continuous integration setup
- Improving and managing our release process
- Implementing policies and processes for managing downtime and service degradations and communicating status to our users
- Collaborating with our team and contracted security consultants to identify and resolve vulnerabilities
- Collaborating with our team to instrument IRIS and identify strategies for improving system performance
- Assisting our developers, QA and support engineers with debugging
- Other duties as assigned

## **Skills & Qualifications**

- **Career experience**
  - 5+ years of total experience in a non-academic development, operations or DevOps role
  - 2+ years of experience in an SRE or equivalent role requiring competency in the areas of responsibility outlined above
- **Technical skills**
  - Demonstrated proficiency in infrastructure design and management for modern web applications
  - Operations experience with common OSS infrastructure components (e.g. nginx, redis, celery)
  - Development experience with a web-oriented back-end programming language and framework
    - Python/Django preferred; mainstream equivalents are acceptable (e.g. Node/Express, Ruby/Rails, PHP/Laravel, Java/Spring, C#/.NET)
  - Development experience with a modern relational database
    - PostgreSQL preferred; mainstream equivalents are acceptable (e.g. MySQL, MS SQL)
  - Development experience with modern front-end technology
    - JavaScript/TypeScript, HTML, CSS
    - React experience is an asset
  - Demonstrated proficiency implementing automation with Ansible
  - Demonstrated proficiency configuring and managing at least one of the major cloud infrastructure providers
    - Azure preferred; Amazon and Google are acceptable
  - Demonstrated proficiency configuring and managing continuous integration servers

- Demonstrated proficiency with git and common branching strategies to facilitate CI/CD
- Demonstrated proficiency with Unix-based operating systems and CLI (e.g. bash scripting)
- Familiarity with our tooling is an asset
  - Bitbucket, Bitbucket Pipelines (CI), Jira, Confluence
- **Soft skills**
  - Leadership qualities and the ability to thrive under autonomy and minimal outside supervision – as our first SRE, we’ll be relying on you to help us level up!
  - Ability to work independently as well as collaborate effectively with other team members in various disciplines (development, QA, product management, IT)
  - A relentless problem solver
  - Ability to communicate effectively with both technical and non-technical stakeholders
  - Ability to give and receive constructive criticism in the spirit of improving the team and our product as a whole (e.g. code review, design feedback)
  - Ability to identify requirements and scope and estimate significant bodies of work
- **Education**
  - Bachelor of Computer Science or equivalent

Strongest Families is committed to creating a diverse and inclusive work environment that invests in building a culture of appreciation and respect. We offer equal opportunity to all candidates seeking employment.

**Please apply with resume and cover letter to:**

[careers@strongestfamilies.com](mailto:careers@strongestfamilies.com)

Attn: Michael Cameron, IRIS Senior Manager